

ABSTRACT

A wireless communication device which performs communication on an internal power supply. The period of a disturbance electromagnetic wave from a microwave oven is accurately detected to avoid any effect of disturbance. A receiving and transmitting circuit are connected to an antenna through a switching circuit, and a frequency synthesizer is also provided. An RSSI signal detected by the receiving circuit is compared with a frequency-divided signal, and a frequency dividing operation is performed on a master clock. When the two signals coincide, a period determination circuit supplies a radiation period signal synchronized with the disturbance wave to a data processor, a frequency hopping controller, a transmission data processor, and a power supply controller, so that a control signal can be shifted into a frequency band with no effect of the disturbance wave and data transmission/reception can be performed during a period of time while no disturbance wave is radiated.